IL-19-05 DZ

Joliet Plant; Broadway & Ingalls 60434

Site is located on property of chemical plant participating in survey and is known to have been used for disposal from 1960 to 1971. Site is no longer in use, having closed in 1973. Amount of chemical process waste disposed of at this site was not reported. Chemical components of waste disposed at this site include inorganics. Methods of disposal include mono industrial waste landfill, mixed industrial waste landfill, drummed waste landfill, pits, ponds and lagoons and incineration.

Joliet, Illinois 60436 1306 McKinley Avenue 60436

Site is located on property of chemical plant participating in survey and is known to have been used for disposal from 1922 to 1979. Site is still being used. Amount of chemical process waste disposed of at this site was not reported. Chemical components of waste disposed at this site include inorganics. Methods of disposal include mono industrial waste landfill, landfill in which municipal waste is co-disposed and pits, ponds and lagoons.

No 1 TRP, Patterson & Laraway Rds P.O. Box 130 60434

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Site is located on property of chemical plant participating in survey and is known to have been used for disposal from 1970 to 1979. Site is still being used. Amount of chemical process waste disposed of at this site was reported as 4,900 hundred tons. Chemical components of waste disposed at this site include heavy metals and trace metals (bonded organically and inorganically) and inorganics. Methods of disposal include pits, ponds and lagoons.

No 2 TRP, Patterson & Laraway Rds P.O. Box 130 60434

Site is located on property of chemical plant participating in survey and is known to have been used for disposal from 1973 to

Stauffer Chemical Co., Industrial Chem. Div., Ingalls at N. Broadway, P.O. Box 639, Joliet, Illinois 50435. No IEPA record of alleged onsite disposal activities.

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EPA Region 5 Records Ctr.

American Cyanamid Co., Joliet, Illinois. 1306 McKinley Ave., Joliet, Illinois 60436. No IEPA record of alleged onsite disposal activities.

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Olin Corp., Olin Chemical Joliet Plant, Patterson Rd. Box 130, Joliet, Illinois 60434. (Third listing)

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Olin Corp., Olin Chemical Joliet Plant. (Fourth listing)

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Scavaging to John Sexton Landfill at 123rd and California since approximately 1976. Supplemental permits for the disposal of 1650 gallons of sodium hydroxide, 220 gallons of a safire - coal tar - disocyanate mixture, and 440 gallons of sodium silicate and caustic waste were approved on December 11, 1979. According to Mr. McQuillin, these drummed wastes were shipped to and stored at the site and their disposal is pending approval of a disposal permit. Other chemicals shipped to and stored within the plant warehouse include anhydrous sodium metasilicate, sodium metasilicate pentahydrate, solid caustic soda, caustic potash, liquid sodium silicate, sodium bicyromate, sufated oleatic acid, and a variety of processed chemicals. Mr. Bill Miller, Plant Manager, of the site explained that no disposal activities have taken place on site in the past. Inspection of the site revealed no evidence of excavation in the recent past. Further investigation is not warranted at present.

Will County -- #19780001 Joliet Channahon Twp./Amoco Chemical Co.

The site was inspected by Charles Gebien on January 30, 1980. During the inspection, Gregory P. Chodil, Process Engineer, Conrad Kirby, Chief Process Engineer, and David Drackley, Process Supervisor, were interviewed. Wastes produced consist of monobasic, dibasic, and tribasic organic acids, aromatic organic aldehydes, acetic acids, heavy metals bonded organically and inorganically, dimethyl esters, monomethyl esters, unreported chemicals, and general refuse. Landfilling operations existed from 1959 to 1976. Amount of waste disposed of reported to be 1,355 hundred tons. IEPA involvement with site began in July 1974, when leachate flow into the DesPlaines was observed. Amoco installed leachate collection system in 1975, although no monitoring wells have been installed to date. Site discontinued landfilling operations in 1976 and began hauling wastes to an IEPA approved landfill (Ottawa/Brockman). Site recorded as sastisfactorily closed and covered August 30, 1977. Amoco currently incinerates approximately 1/2 of its total waste, and contracts Browning Ferris and Illinois Valley Disposal to haul the non-incinerable organic acids, polystrenes and metal contaminated inorganic acid wastes to C.I.D., E.S.L., Mallard Lake, and Brockman Landfills.

Although the site has been closed, covered and vegetated, IEPA should continue inspections of site to insure proper functioning of leachate collection system, and possibly sample the DesPlaines River immediately upstream and downstream from the site.

Will County
Joliet/Stauffer Chemical Company

On January 23, 1980, Mary Schroeder conducted an inspection of the Stauffer Chemical facility. Mr. Norman Kjos, Plant Manager, was contacted prior to the inspection. Stauffer purchased the facility in 1968 from Cowles Chemical Company. Stauffer began manufacturing at the site in 1970. Anhydrous and penhydrous metasilicates are manufactured at the site. Sodium metasilicate is generated as a result of these processes. Mr. Kjos indicated that the sodded area south of the plant

used to be a limestone quarry. After the quarrying operation had ceased, the pit served as a runoff and retention pond for the chemical plant. Sodium metasilicate settled onto the base of the quarry. This procedure continued until 1971.

The quarry was filled in with limestone from the canal dredgings in 1973. The dimensions of this area are about 200 feet by 300 feet. Presently, the sodium metasilicate is landfilled at Joliet/E.S.L., an EPA approved sanitary landfill. The movement of the waste is documented on an IEPA manifest. A sampling and surveillance program is to be initiated to determine the extent of pollution, if any, and whether legal action should be taken.

Will County Joliet/American Cyanamide

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The site was inspected by Charles Gebien on January 30, 1980. During this inspection, Mr. E. P. Stewart, Plant Superintendent, and Mr. Richard B. Tabakin, Environmental Coordinator were interviewed. The American Cyanamide plant of Joliet produces alum (aluminum sulfate) by reacting alumina ores with sulfuric acid. This process produces a low pH alum mud waste at a rate of approximately 10,000 yds.3/year. This mud consists primarily of silicon dioxide with unknown percentage of heavy and trace metals. A copy of a waste analysis report performed by the Radian Corp. was provided to the Agency during the inspection. This report analyzed mud wastes from American Cyanamide's Coosa alum plant and Demopolis alum plant for pH and the following metals: As, Ba, Cd, Pb, Hg, Se, Cr and Aq. The average pH of mud samples taken was 3.14 + .15. Of the eight metals tested for, Pb, Cd, and Ba concentrations were highest, ranging from .005 - .012 mg/l Pb, .028 - .048 mg/l Ba and .002 - .022 mg/l Cd. As, Hg, Se, Cr, and Ag were all less than .009 mg/l. Analysis of the American Cyanamide/Joliet plant waste alum muds was not provided.

American Cyanamide has been operating at the site since 1922 having only minor process changes to date. Waste alum mud is disposed of on site via a lagooning system. From 1922 to 1966, low pH wastewater containing the alum wastes were directed on-site to a lagoon immediately northeast of the plant buildings, where waste alum muds settled. When this lagoon filled in 1966, a new double-lagoon system was constructed in the southern section of the site. This double-lagoon system which is presently in operation utilizes an underground piping system in which wastewater is pumped to the upper impound, allowed to settle and decanted to the lower impound, from which it is returned to the plant for reuse. General refuse produced at the site is hauled by Banner Disposal Service. According to Mr. Stewart of American Cyanamide, no landfilling other than lagooning has ever occurred on-site.

Further IEPA investigation is warranted. Sampling of present plant effluent, past alum mud waste lagooning deposits is suggested. Area groundwater survey should be initiated if waste sampling analysis indicates potential groundwater contamination capabilities.